## Holt McDougal

## Holt McDougal Mathematics, Courses 1, 2, and 3, Grades 6-8

Degree of Evidence regarding the Standards for Mathematical Practice:

## **Limited Evidence**

## **Summary of evidence:**

- 1. **Make sense of problems and persevere in solving them**. There is limited evidence of this practice throughout the series. Although the "motivate" sections ask students to think about the mathematics they are about to study, the reviewers noted that there are few other opportunities for students to make sense of problem situations on their own or discuss their ideas with others. There is limited support for the teacher in looking for or encouraging multiple approaches to solving problems.
- 2. **Reason abstractly and quantitatively**. There is limited evidence of this practice. The reviewers noted that there are opportunities for students to contextualize and to decontextualize, but these opportunities typically occur only after prescribed procedures are introduced; therefore, the richness of this practice is significantly reduced.
- 3. **Construct viable arguments and critique the reasoning of others**. There is limited evidence of this practice. The reviewers noted two structures—"Think and discuss" at the beginning of lessons and "Write about it" and the end of lessons—that promote student reflection and communication; however, this practice is not embedded in the core of the lesson activities.
- 4. **Model with mathematics**. This practice is underdeveloped and was cited as a particular weakness at Grades 6 and 8. Although models are frequently referenced in the sampled sections, students are not required to model mathematics themselves or look for connections between the models and the mathematics concepts. Students are provided with models and told how to use them, thereby reducing the richness of this practice as described in the standards.
- 5. **Use appropriate tools strategically.** There is limited evidence of this practice. A variety of tools are used, but students are told specifically which tools to use and how to use them, so students are not selecting and using tools strategically for themselves. There is some reference to use of technology, but not in the core of the lessons.
- 6. **Attend to precision.** This practice is underdeveloped. Students are prompted to use correct notation and labels; however there are few opportunities for student discourse, as described in this standard, and limited support for teachers in facilitating such discourse.
- 7. **Look for and make use of structure**. There is minimal or limited evidence of this practice. The reviewers noted missed opportunities: for example, a given context or lesson provides a good place to integrate this practice, but instead of having students look for and make use of structure, all rules and procedures are given to students.
- 8. Look for and express regularity in repeated reasoning. This practice is especially underdeveloped. Rules and procedures are specifically prescribed for students, and there are few opportunities for meaningful student reflection, as described in this standard.